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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/589,170	06/08/2000	Ryuji Kohno	192919US2 9759			
22850	7590 03/28/2005		EXAMINER			
•	IVAK, MCCLELLAND,	PERILLA, JASON M				
1940 DUKE S ALEXANDR	STREET IA, VA 22314	ART UNIT	PAPER NUMBER			
			2634			
				DATE MAILED: 03/28/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	No.	Applicant(s)			
Office Action Summary		09/589,170		KOHNO ET AL.			
		Examiner		Art Unit			
		Jason M Per	illa	2634			
Period f	The MAILING DATE of this communication apport	pears on the c	over sheet with the c		iress		
A SH THE - Exte after - If th - If NO - Fail Any	HORTENED STATUTORY PERIOD FOR REPLIMAILING DATE OF THIS COMMUNICATION.  The ensions of time may be available under the provisions of 37 CFR 1.1 or SIX (6) MONTHS from the mailing date of this communication. The period for reply specified above is less than thirty (30) days, a replication of the provision of the period for reply is specified above, the maximum statutory period for the provision of the period for reply within the set or extended period for reply will, by statute the provision of the provision of the provision of the period for reply will, by statute the provision of the provision	136(a). In no event, ly within the statutor will apply and will e e, cause the applica	however, may a reply be tim ry minimum of thirty (30) days xpire SIX (6) MONTHS from tion to become ABANDONEI	nely filed s will be considered timely, the mailing date of this coi D (35 U.S.C. § 133).	mmunication.		
Status							
1)[	Responsive to communication(s) filed on 21 C	October 2004.					
2a)□	a) This action is <b>FINAL</b> . 2b) This action is non-final.						
3)⊠	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)							
Applicat	ion Papers						
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>08 June 2000</u> is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	a) accepted drawing(s) be ction is required	held in abeyance. See if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CF	• •		
Priority	under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
Attachmer	nt(s) ce of References Cited (PTO-892)	41	)	(PTO 412)			
2)  Notice 3)  Infor	ce of References Cited (PTO-692) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date	,	Paper No(s)/Mail Da  Notice of Informal P  Other:	ate	-152)		

## **DETAILED ACTION**

1. Claims 4, 5, 10-12 and 15-18 are pending in the instant application.

## Claim Objections

2. Claims 4, 5, 10-12 and 15-18 are objected to because of the following informalities:

Regarding claim 4, in line 8, "the frequency" is lacking antecedent basis, in line 10, "said transmission signal" is lacking antecedent basis, in lines 11 and 16, "an output signal" should be replaced by --the output signal—or, alternatively, each instance of "an output signal" should be consecutively named as a first, second, third, ... output signal to make the claim language definite, in line 12, "the transmission channel" is lacking antecedent basis, in lines 17, 19, and 28, "a receiving channel" should be replaced by – the receiving channel-- or, alternatively, each instance of "a receiving channel" should be consecutively named as a first, second, third, ... receiving channel to make the claim language definite, in line 19-20, "a transmission channel" should be replaced by –the transmission channel--, or, alternatively, each instance of "a transmission channel" should be consecutively named as a first, second, third, ... transmission channel to make the claim language definite, and, in line 25, "the signal strength" is lacking antecedent basis.

Regarding claim 5, in line 6, "a receiving channel" should be replaced by –the receiving channel--, or, alternatively, each instance of "a receiving channel" should be consecutively named as a first, second, third, ... receiving channel to make the claim language definite,

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Regarding claim 10, in line 9, "the frequency" is lacking antecedent basis, in line 11, "the time constant of said filter means" is lacking antecedent basis, in line 12, "said transmission signal" is lacking antecedent basis, in lines 13, 18, 20, and 26, "an output signal" should be replaced by --the output signal—or, alternatively, each instance of "an output signal" should be consecutively named as a first, second, third, ... output signal to make the claim language definite, in line 14, "the transmission channel" is lacking antecedent basis, in lines 18, 23, and 32, "a receiving channel" should be replaced by – the receiving channel—or, alternatively, each instance of "a receiving channel" should be consecutively named as a first, second, third, ... receiving channel to make the claim language definite, and, in line 29, "the signal strength" is lacking antecedent basis.

Regarding claim 11, in line 9, "the frequency" is lacking antecedent basis, in line 11, "the time constant of said filter means" is lacking antecedent basis, in line 12, "said transmission signal" is lacking antecedent basis, in lines 13, 18, 20, and 26, "an output signal" should be replaced by --the output signal—or, alternatively, each instance of "an output signal" should be consecutively named as a first, second, third, ... output signal to make the claim language definite, in line 14, "the transmission channel" is lacking antecedent basis, in lines 18, 23, and 32, "a receiving channel" should be replaced by – the receiving channel--- or, alternatively, each instance of "a receiving channel" should be consecutively named as a first, second, third, ... receiving channel to make the claim language definite, in line 29, "the modulation system" is lacking antecedent basis, and, in line 31, "the discrimination result" is lacking antecedent basis.

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Regarding claim 12, in line 9, "the frequency" and "said output signal" are lacking antecedent basis, in line 11, "the time constant of said filter means" is lacking antecedent basis, in line 12, "said transmission signal" is lacking antecedent basis, in lines 9, 13, 18, 20, and 25-26, "an output signal" should be replaced by --the output signal—or, alternatively, each instance of "an output signal" should be consecutively named as a first, second, third, ... output signal to make the claim language definite, in line 14, "the transmission channel" is lacking antecedent basis, in lines 18, 23, and 35, "a receiving channel" should be replaced by -the receiving channel-- or, alternatively, each instance of "a receiving channel" should be consecutively named as a first, second, third, ... receiving channel to make the claim language definite, in line 31, "the modulation system" is lacking antecedent basis, and, in line 34, "the discrimination result" is lacking antecedent basis.

Regarding claim 15, in lines 7, 14 and 19, "said [a] received signal" is lacking antecedent basis, in lines 8 and 11, "said output signal" is lacking antecedent basis, in lines 9-10, "the transmission channel" is lacking antecedent basis, in line 10, "said transmission signal" is lacking antecedent basis, in line 15, "includes signal strength measuring circuit" should be replaced by –includes a signal strength measuring circuit—, in line 16, "the signal strength" is lacking antecedent basis, in lines 16-17, "each of outputs" is lacking antecedent basis because there is no basis for antenna outputs and "said received antennas" are lacking antecedent basis, and, in line 18, "said unit selection period" is lacking antecedent basis.

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Regarding claim 16, in line 3, "said received signals" is lacking antecedent basis, in line 9, "said output signal" is lacking antecedent basis, in lines 10-11, "the transmission channel" is lacking antecedent basis, in line 11, "said transmission signal" is lacking antecedent basis, in line 12, "the time constant" and "the frequency" are lacking antecedent basis, in line 18, "includes signal strength measuring circuit" should be replaced by –includes a signal strength measuring circuit--, in line 19, "the signal strength" is lacking antecedent basis, in line 20, "the output" is lacking antecedent basis because there is no basis for antenna outputs and "said received antennas" are lacking antecedent basis, in line 21, "a receiving channel" should be replaced by –the receiving channel--, in lines 22-23. "the signal strength" is lacking antecedent basis, in line 23, "said filter" should be replaced by –said loop filter--, in line 24, "to a local oscillation" should be replaced by –from a local oscillation--, and, in line 25, "at one terminal and a receiving channel at the other terminal" should be replaced by –at one frequency to a receiving channel at another frequency--.

Regarding claim 18, in line 2, "a receiving channel" should be replaced by –the receiving channel--, and in line 3, "said synthesized signal strength" should be replaced by –said signal strength synthesized--.

Appropriate correction is required.

## Conclusion

3. This application is in condition for allowance except for the following formal matters:

The objections above...

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Prosecution on the merits is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Perilla whose telephone number is (571) 272-3055. The examiner can normally be reached on M-F 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M. Perilla March 11, 2005

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CHIEH M. FAN PRIMARY EXAMINER